

Continuing Airworthiness Notice – 34-001



Mode S Transponder Maintenance

12 July 2011

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

The contents of this notice are ADVISORY ONLY and are NOT MANDATORY.
CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

All operators and maintainers of aircraft fitted with Mode S Transponders.

Purpose:

This Continuing Airworthiness Notice (CAN) is issued to highlight the potential problems associated with Mode S transponders and provide guidance for the testing and inspection of transponders.

Background:

The CAA is aware of incidents where complete or intermittent loss of detection has been experienced by Mode S SSR interrogators, and incidents of aircraft operating with an incorrect ICAO 24-bit aircraft address code. A safe navigation environment in transponder mandatory airspace relies on accurate and reliable surveillance information transmitted by Mode S transponders. Incorrect or missing transponder data can result in increased controller and/or flight crew work load which may develop into a hazardous situation.

EASA and Eurocontrol have identified similar incidents with aircraft operating in the European airspace and EASA subsequently issued Safety Information Bulletin (SIB) 2011-15 dated 4 July 2011.

Recommendation:

In addition to the requirements in NZCAA rule 91.605 (e)(3) the CAA recommends the checks contained in EASA Safety Information Bulletin (SIB) 2011-15. These checks are in the interest of aviation safety and the SIB provides guidance for the ground testing of Mode S transponders to ensure acceptable transponder performance.

If you become aware, or are notified of a transponder deficiency affecting your aircraft, the CAA recommends that you initiate an unscheduled maintenance action to correct any deficiencies.

A copy of EASA SIB No: 2011-15 can be obtained from: <http://ad.easa.europa.eu/search/advanced/>

Enquiries:

Enquiries with regard to the content of this CAN should be sent to:

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